

Social Cost of Carbon

1. We discussed climate change as an example of a negative externality. the social cost of carbon is the social cost associated with the emission of greenhouse gases. If we could reliably quantify the social cost of carbon, then a tax could be a solution to climate change.
2. In practice, estimating the social cost of is difficult. The first step is predicting future GDP, emissions, GDP, etc. This is necessary because we want the marginal harm of additional emissions. Furthermore, this forecast must extend decades or centuries into the future.
3. The next step is to model how emissions will affect environmental factors such as sea level rise and temperature. Relatively few researchers are adept at both #2 and #3.
4. Next, we must determine how the environmental impact will affect economic and health outcomes.
5. Finally, we must convert the effects from #5 into a current dollar value. The big debate is how much to discount the future. If we discount by a 5% per year (so that a dollar tomorrow is worth 98.5 cents today), then the social cost of carbon is about four times higher than if we discount by 3%.
6. In the U.S., the social cost of carbon has never been used as the basis for a carbon tax. Instead, it has been used for regulatory purposes. President Trump has, however, ordered the EPA and other regulators not to use it.